



CITY OF DURHAM | NORTH CAROLINA

Date: September 6, 2016

To: Thomas J. Bonfield, City Manager
Through: Keith Chadwell, Deputy City Manager
From: Terry Bellamy, Transportation Director

Subject: Barbee Road, Herndon Road, and Massey Chapel Road Roundabout Construction Agreement

Executive Summary

The N. C. Department of Transportation (NCDOT) is scheduled to construct a roundabout at the intersection of Barbee Road, Herndon Road, and Massey Chapel Road in south Durham. The project has been bid three times unsuccessfully due to high bids and insufficient funds. NCDOT estimates that the project is \$100,000 short of funding and has requested support from the City of Durham. A Construction Agreement is proposed to enable the City to contribute towards the project should the next bids exceed NCDOT's current funding.

Recommendation

The Department of Transportation recommends that the City Council authorize the City Manager to execute the Barbee Road, Herndon Road, and Massey Chapel Road Roundabout Construction Agreement with the N. C. Department of Transportation in an amount not to exceed \$100,000.00 of cost to the City. The agreement is provided as Attachment B. The Administration recommends that the City Council adopt an ordinance amending the General Capital Improvement Project Ordinance, Fiscal Year 2016-2017, as amended, the same being Ordinance # 14945 for the purpose of adding street impact fee funding in the amount of \$100,000.00 for the Federal and State Match projects. The Department of Transportation recommends that the City Council find that the Barbee Road, Herndon Road, and Massey Chapel Road Roundabout is at least 7.4% necessitated by new construction and that up to 7.4% of the capital costs of that project may be paid by impact fees collected within the same service zone and collected for the same purpose.

Background

The City of Durham and NCDOT mutually identified the need for the construction of a roundabout at Barbee Road, Herndon Road, and Massey Chapel Road several years ago as development increased in this portion of southern Durham County. Increasing traffic and the skew of the intersection have led to resident complaints about congestion and safety. A roundabout was identified as the recommended improvement for the intersection. NCDOT held a Citizen's Informational Workshop on April 8, 2013 on this project.

The project also includes the construction of new sidewalks within the City of Durham limits on the east and south legs and replacement of existing sidewalk on the north leg. NCDOT did not require City funding to construct new sidewalks as part of the project. A separate Sidewalk Agreement was executed in April 2015 to describe the City's liability and maintenance responsibilities for the sidewalks within the City limits. The project will also require the relocation and adjustment of City utilities located within the NCDOT right-of-way. A separate Utility Agreement was approved by Council in July 2014.

NCDOT originally planned to construct the project with \$750,000 of state funds. Engineering and utility relocation has used \$250,000 of the total funding. NCDOT received bids twice in 2015. Both times the bids exceeded the engineer's estimate and available funding. NCDOT added pay items to the project in response to contractors' concerns and revised the project design to cut costs as much as possible.

In August 2015, the City Council authorized the Mayor to request additional discretionary funding from the General Assembly for the project. This request was successful, and in January 2016, the NC Board of Transportation approved an additional \$500,000 for the project from contingency funds from the Secretary of Transportation and the NC Senate. The project was re-advertised in 2016 and the bids again exceeded the available \$1,000,000 budget. Even though the pay quantities decreased due to the design revisions, the unit costs have been driven up significantly by the high volume of construction activity in the area.

Issues and Analysis

NCDOT has taken several steps to reduce project costs and increase funding. It would be difficult to reduce the project cost further while still maintaining the features of a standard roundabout. The roundabout concept has been presented to the public and widely supported.

NCDOT bidding procedures require that an engineer's estimate be developed for the project and the department is generally not able to award contracts that exceed this estimate by more than 10% to help ensure that the public does not overpay for projects. In addition, NCDOT has received at least three bidders for the project with all consistently providing higher bids. NCDOT has noted that this is consistent with several other similar projects this year. This appears to reflect an overall trend in the construction market due to a high volume of work in the area.

In addition, all funding sources that are available in the short-term have been committed to the project. Traditional sources of state funding and contingency funding through NCDOT and the General Assembly have both already been programmed to the project.

It has been more than three years since the public workshop for this project. It is still a high safety concern in south Durham. The bidding issues have delayed the project significantly. Staff recommends that the City assist NCDOT by agreeing to contribute up to \$100,000 in Street Impact Fees to help fund the project. The language of the agreement ensures that the City's funding will not supplant any of the existing state funding, and only the minimum amount needed to award the contract will be provided.

There is a Street Impact Fee balance of \$25,669 in Zone 1 (the older zone for south Durham) and \$6,400,287 in Zone 4 (the newer zone for south Durham). Street Impact Fees are collected from developers for the purpose of mitigating for the traffic impact of development. Construction of a

roundabout at this location is an eligible expense under the enabling legislation for Street Impact Fees. Development in south Durham near this roundabout has resulted in increased traffic and exacerbated the safety concerns creating the need for this improvement.

Alternatives

- Authorize the City Manager to execute the Construction Agreement for the Barbee Road, Herndon Road, and Massey Chapel Road Roundabout.
- Do not authorize the execution of the Construction Agreement for Barbee Road, Herndon Road, and Massey Chapel Road Roundabout. The project would be on hold indefinitely unless other funding was identified.

Financial Impact

The cost to the City is up to \$100,000.00. The recommended funding source is Street Impact Fees for Zone 1 and 4 (south Durham). Upon project completion, the City will assume the ongoing sidewalk maintenance and liability for the sidewalk within the City of Durham per the existing executed Sidewalk Agreement.

UBE Summary

NCDOT agreements require that their contracting procedures be followed for these projects. The Department of Equal Opportunity/Equity Assurance did not review this item for compliance with the Ordinance to Promote Equal Business Opportunities in City Contracting.

Attachments

A – Project Map

B – Construction Agreement